



State Revolving Fund Loan Programs

Drinking Water, Wastewater, Nonpoint Source

ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

TOWN OF BROWNSBURG

New Water Treatment Plant No. 1 & New Distribution Main,

New Well #9 & New Raw Water Main,

STATE REVOLVING FUND PROJECT # DW 10 13 32 01

DATE: August 26, 2011

TARGET PROJECT APPROVAL DATE: September 26, 2011

I. INTRODUCTION

The above entity has applied to the Drinking Water State Revolving (DWSRF) Loan Program for a loan to finance all or part of the drinking water project described in the accompanying Environmental Assessment (EA). As part of facilities planning requirements, an environmental review has been completed which addresses the project's impacts on the natural and human environment. This review is summarized in the attached EA, which can also be viewed at <http://www.in.gov/ifa/srf/>.

II. PRELIMINARY FINDING OF NO SIGNIFICANT IMPACT (FNSI)

The DWSRF has evaluated all pertinent environmental information regarding the proposed project and determined that an Environmental Impact Statement is not necessary. Subject to responses received during the 30-day public comment period, and pursuant to Indiana Code 4-4-11, it is our preliminary finding that the construction and operation of the proposed facilities will result in no significant adverse environmental impact. In the absence of significant comments, the attached EA shall serve as the final environmental document.

III. COMMENTS

All interested parties may comment upon the EA/FNSI. Comments must be received at the address below by the deadline date above. Significant comments may prompt a reevaluation of the preliminary FNSI; if appropriate, a new FNSI will be issued for another 30-day public comment period. A final decision to proceed, or not to proceed, with the proposed project shall be effected by finalizing, or not finalizing, the FNSI as appropriate. Comments regarding this document should be sent within 30 days to:

Max Henschen
Senior Environmental Manager
State Revolving Fund
100 N. Senate Ave. IGCN 1275
Indianapolis, IN 46204
317-232-8623; mhensche at ifa.in.gov

ENVIRONMENTAL ASSESSMENT

I. PROJECT IDENTIFICATION

Project Name and Address: **New Water Treatment Plant No. 1 & Transmission Main; New Well # 9 and Raw Water Main**
Town of Brownsburg
61 N. Green Street
Brownsburg, IN 46112

SRF Project Number: DW10 13 32 01

Authorized Representative: Dale A. Cheatham, Town Manager

II. PROJECT LOCATION AND BACKGROUND

The projects are located in Brownsburg, Hendricks County, Lincoln Township. The proposed new water treatment plant (WTP) No. 1, finished water line and proposed ground water well #9 and raw water main are in Arbuckle Acres Park, T16N, R1E, NE ¼ section 10 and NW ¼ section 11, Brownsburg USGS 7.5' quadrangle. See Figure 1-1.

III. PROJECT NEED AND PURPOSE

The existing WTP No. 1 that serves a portion of the Brownsburg service area is over 40 years old, and the equipment has reached its useful life. Additionally, the current plant is capable of producing only 0.69 million gallons per day (MGD) average daily capacity, which is less than the current average daily demand of .75 MGD. To meet the deficiency, Brownsburg buys water from the Indianapolis Water Company. Therefore, to address existing average and peak water demands, projected water demands, reduce the town's dependency on purchased water, and reduce operation and maintenance costs, the town will construct a new WTP, install an additional ground water well and raw water main, and install a water main to connect the WTP to the distribution system.

IV. PROJECT DESCRIPTION

The project will: (1) construct a new 3.2 MGD WTP with horizontal pressure filters, three new vertical turbine 1,111 gallons per minute (GPM) high service pumps with VFDs, forced draft aerator, emergency odor scrubber, detention tank, air-wash backwash system, 68,000 gallon detention tank, 30,000 gallon backwash holding tank, chemical feed systems, Supervisory Control and Data Acquisition system, 500 KW generator, lab instrumentation, (2) demolish the existing WTP; (3) install a new 700 GPM well #9 with well house with approximately 460 feet 6-inch raw water main; (4) install approximately 200 feet of 12-inch raw water main from existing WTP to new WTP; (5) install approximately 120 feet of 8-inch raw water main from Well #2A to the new WTP; and (6) approximately 1,980 feet of 16-inch diameter transmission main. See Figures 4-2 and 4-3.

V. ESTIMATED PROJECT COSTS, AFFORDABILITY AND FUNDING

A. Selected Plan Estimated Cost Summary:

Construction Costs	Estimated Costs
New Well and Raw Water Main	\$ 196,000
New Transmission Main	197,000
New Water Treatment Plant	3,239,000
Contingency	<u>363,000</u>
Construction Total	\$3,995,000
Non-Construction Costs	
Construction Engineering and PER Preparation	\$ 409,000
Administrative and Legal Fees	<u>102,000</u>
Non-Construction Total	\$ 511,000
Total Project Cost	\$4,506,000

- B. Brownsburg plans to finance the project through a 20-year State Revolving Fund (SRF) loan at an interest rate to be determined at the loan closing. Monthly user rates and charges may need to be analyzed to determine if adjustments are required for loan repayment.

VI. DESCRIPTION OF EVALUATED ALTERNATIVES

No Action: This alternative was rejected, since the current deficiencies in meeting demands would continue.

Expansion/Upgrade of the Existing Water Treatment Plant: This alternative would require that the existing 40 year old structure be reused, modified and expanded to accommodate new process and chemical equipment, lab and office space, and increased capacity of the detention and backwash storage tanks. This alternative was rejected due to high projected construction costs.

Construction of a New Water Treatment Plant: This is the selected alternative.

VII. ENVIRONMENTAL IMPACTS OF THE FEASIBLE ALTERNATIVES

A. Direct Impacts of Construction and Operation

Disturbed / Undisturbed Land: The WTP will be constructed on previously disturbed land over an existing parking lot. The proposed finished water main will be constructed by open-cut on the north side of Lucas Drive in an open grass area and parallel to an existing water main. The proposed well and part of the raw water main will be constructed through an open grass area surrounded by woods.

Structural Resources: (Figures 5-1 and 5-2) Construction and operation of the projects will not alter, demolish or remove historic properties. If any visual or audible impacts to historic properties occur, they will be temporary and will not alter the characteristics that qualify such

properties for inclusion in or eligibility for the National Register of Historic Places. The SRF's finding pursuant to Section 106 of the Historic Preservation Act is: "no historic properties affected."

Wetlands: (Figure 5-3) The proposed raw water main installation will be directly next to a forested wetland. However, the main will be installed by horizontal drilling.

Surface Waters: The proposed projects will not affect streams. The proposed raw water main will cross under White Lick Creek using the horizontal directional drilling construction method. The projects will not adversely affect waters of high quality listed in 327 IAC 2-1-2(3), exceptional use streams listed in 327 IAC 2-1-11(b), Natural, Scenic and Recreational Rivers and Streams listed in 312 IAC 7-(2), Salmonid Streams listed in (327 IAC 2-1.5-5(a)(3), or waters on the Outstanding Rivers list (Natural Resources Commission Non-rule Policy Document).

Floodplain: (Figure 5-4) The ground water well and water main projects are located within the 100-year floodway; the well house for the proposed ground water well will be constructed approximately 2 feet above the 100-year flood elevation.

Groundwater: Dewatering of the site may be necessary and may cause temporary lowering of the groundwater table. Interruption of well water supply during construction is not anticipated. If necessary, discharge from dewatering will be directed through a dewatering bag and then through a No. 2 stone filter bed prior to discharging into surface waters. The project will not affect a sole source aquifer.

Plants and Animals: The construction and operation of the project will not negatively impact state or federal-listed endangered species or their habitat. Directional drilling for the raw water main will avoid impacts to White Lick Creek (a riverine wetland) and wooded riparian areas.

Prime Farmland: The project will not convert prime farmland.

Air Quality: Construction activities may generate some noise, fumes and dust.

Open Space and Recreational Opportunities: The WTP and water main project will affect a portion of Arbuckle Acres Park.

Lake Michigan Coastal Program: The proposed project will not affect the Lake Michigan Coastal Zone.

National Natural Landmarks: Construction and operation of the proposed project will not impact National Natural Landmarks.

B. Indirect Impacts

The town's Preliminary Engineering Report (PER) states: *The Town of Brownsburg through the authority of its Council, planning commission, or other means, will ensure that future supply, storage, distribution, or treatment works projects connecting to SRF funded facilities, will not adversely impact wetlands, archaeological/historical/structural resources, wetlands, wooded area[s] or other sensitive environmental resources. The Town will require new development and*

treatment works projects to be constructed within the guidelines of the U.S. Fish and Wildlife Service, IDNR, IDEM, and other environmental review authorities.

C. Comments by Environmental Review Authorities

The IDNR Division of Historic Preservation and Archaeology, in correspondence dated August 12, 2011, stated: *Pursuant to IC 13-18-21 and 327 IAC 14 and Section 106 of the National Historic Preservation Act (16 U.S.C § 470f) and 36 C.F.R. Part 800, the Indiana State Historic Preservation Officer ("Indiana SHPO") is conducting an analysis of the materials dated and received by the Indiana SHPO on [July] 22, 2011 for the ...project in Brownsburg, Lincoln Township, Hendricks County, Indiana. Based on our analysis, it has been determined that no historic properties will be altered, demolished, or removed by the proposed project provided that all project activities remain within area(s) disturbed by previous construction. If any archaeological artifacts, features, or human remains are uncovered during construction, state law (Indiana code 14-21-1-27 and 29) requires that the discovery must be reported to the Department of Natural Resources within two business days.*

The U.S. Fish and Wildlife Service, in correspondence dated July 26, 2011, stated: *These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.) and are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U. S. Fish and Wildlife Service's Mitigation Policy.*

Based on a review of the information you provided, the U.S. Fish and Wildlife Service has no objections to the project as currently proposed. This precludes the need for further consultation on this project as required under Section 7 of the Endangered Species Act of 1973, as amended. However, should new information arise pertaining to project plans or a revised species list is published, it will be necessary for the Federal agency to reinstate consultation...If project plans change such that fish and wildlife habitat may be affected, please re-coordinate with our office as soon as possible.

The Natural Resources Conservation Service, in correspondence dated February 23, 2011, stated: *The proposed project...will not cause a conversion of prime farmland.*

The IDNR Environmental Unit has not yet commented on the project.

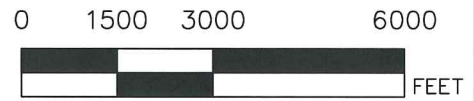
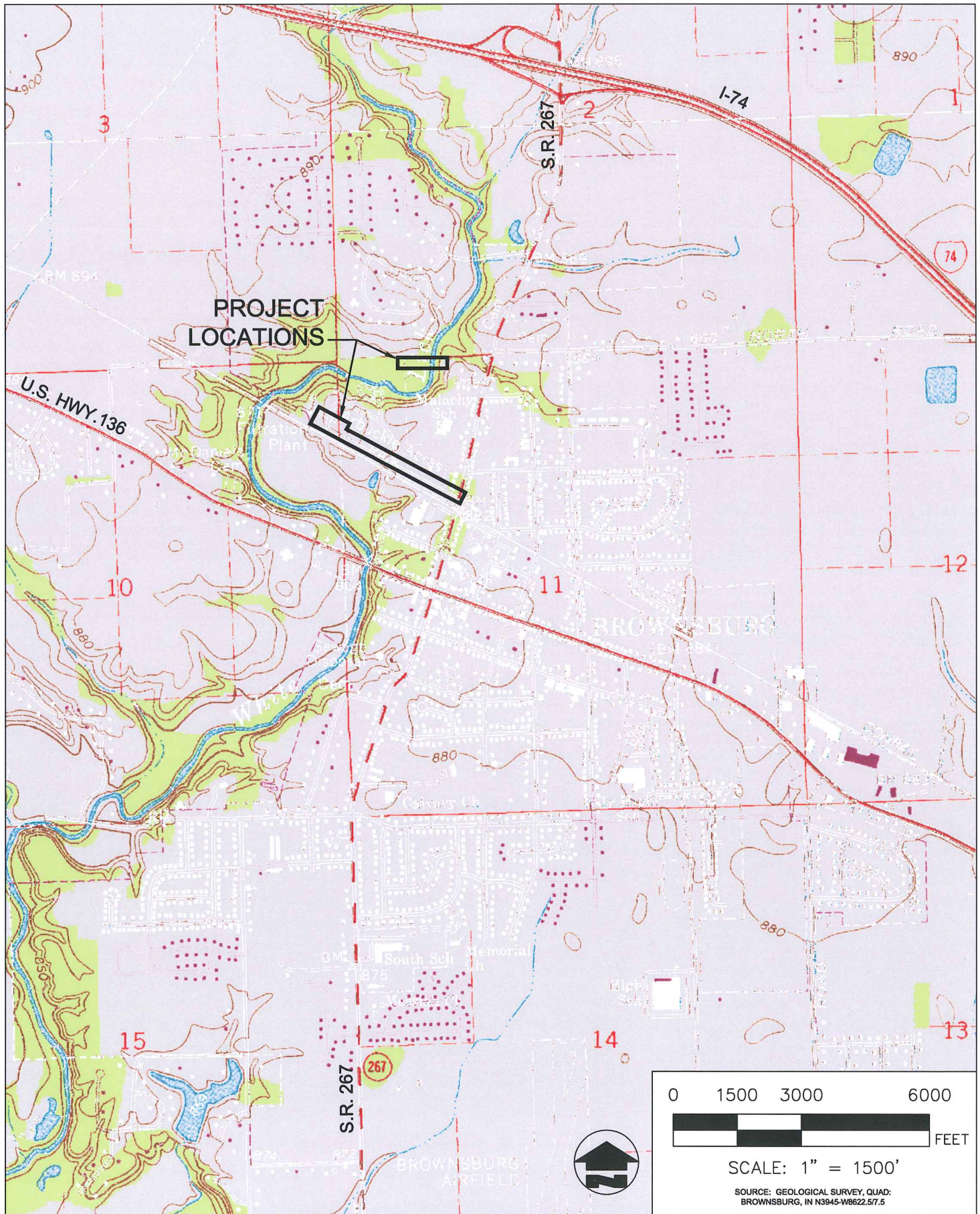
VIII. MITIGATION MEASURES

The town's PER states: *Land grading and excavating will be kept to a minimum in order to reduce runoff and erosion problems. An erosion and sedimentation control plan will be developed and implemented in coordination with the Indiana Stormwater Quality Manual. The project will be implemented to minimize impact to non-endangered species and their habitat. If applicable, mitigation measures cited in comment letters from the Indiana Department of Natural Resources and the U.S. Fish and Wildlife Service will be implemented. The demolition of the existing plant building and pressure filters will be completed in a manner to avoid lead-based paint and asbestos-related material release. An environmental testing firm will be consulted prior to construction to sample these facilities for hazardous materials and provide*

recommendations for removal and mitigation. Project specifications will require suitable noise and air quality controls related to construction activities.

IX. PUBLIC PARTICIPATION

A properly noticed public hearing was held on April 14, 2011 at 7:00 pm at the Brownsburg Town Hall to discuss the PER. No comments on the project were voiced at the public hearing, and no written comments were submitted in the five-day period following the public hearing.



SCALE: 1" = 1500'

SOURCE: GEOLOGICAL SURVEY, QUAD:
BROWNSBURG, IN N3945-W8622.5/7.5

GRW PROJECT NO. 3960-01				DESIGNED: DSW
REVISIONS				DRAWN: CDW
NO.	DESCRIPTION	DATE	BY	REVIEWED: CJF
				APPROVED: DSW
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GENERAL PROJECT LOCATION MAP

PRELIMINARY ENGINEERING REPORT NEW WATER TREATMENT PLANT TOWN OF BROWNSBURG, INDIANA



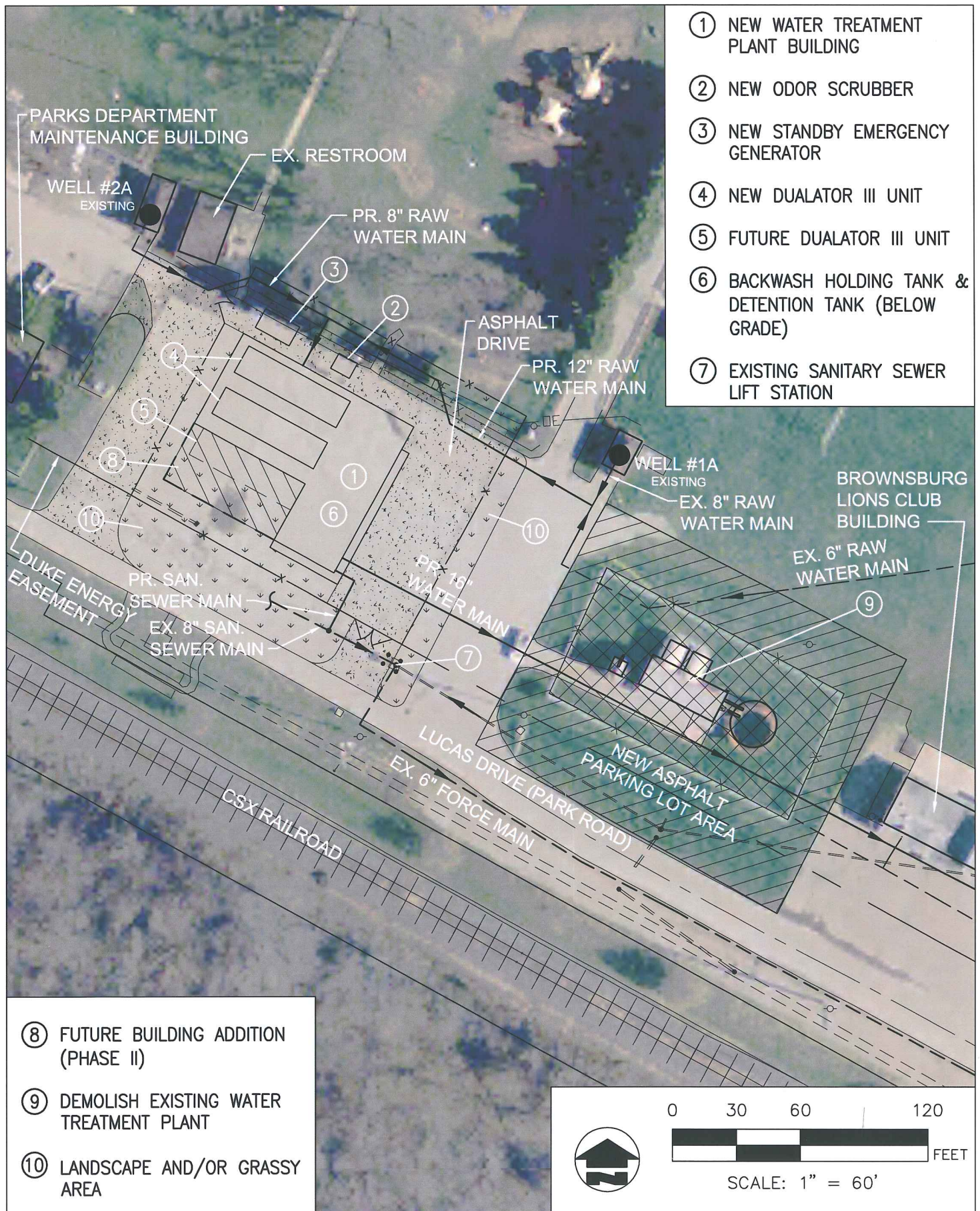
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DATE:
APRIL, 2011

SCALE:
1" = 1500'

FIGURE NO.
1-1



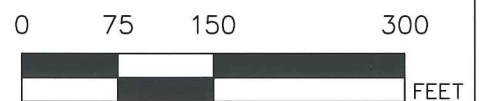
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PROPOSED SITE PLAN
ALTERNATIVE 3B
PRELIMINARY ENGINEERING REPORT
NEW WATER TREATMENT PLANT
TOWN OF BROWNSBURG, INDIANA


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DATE:
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 SCALE:
 1" = 60'
 FIGURE NO.
4-2



SCALE: 1" = 150'

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PROPOSED SITE PLAN **WELL # 9** **PRELIMINARY ENGINEERING REPORT** **NEW WATER TREATMENT PLANT** **TOWN OF BROWNSBURG, INDIANA**



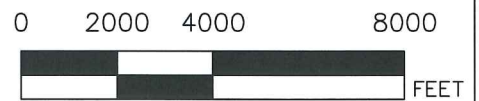
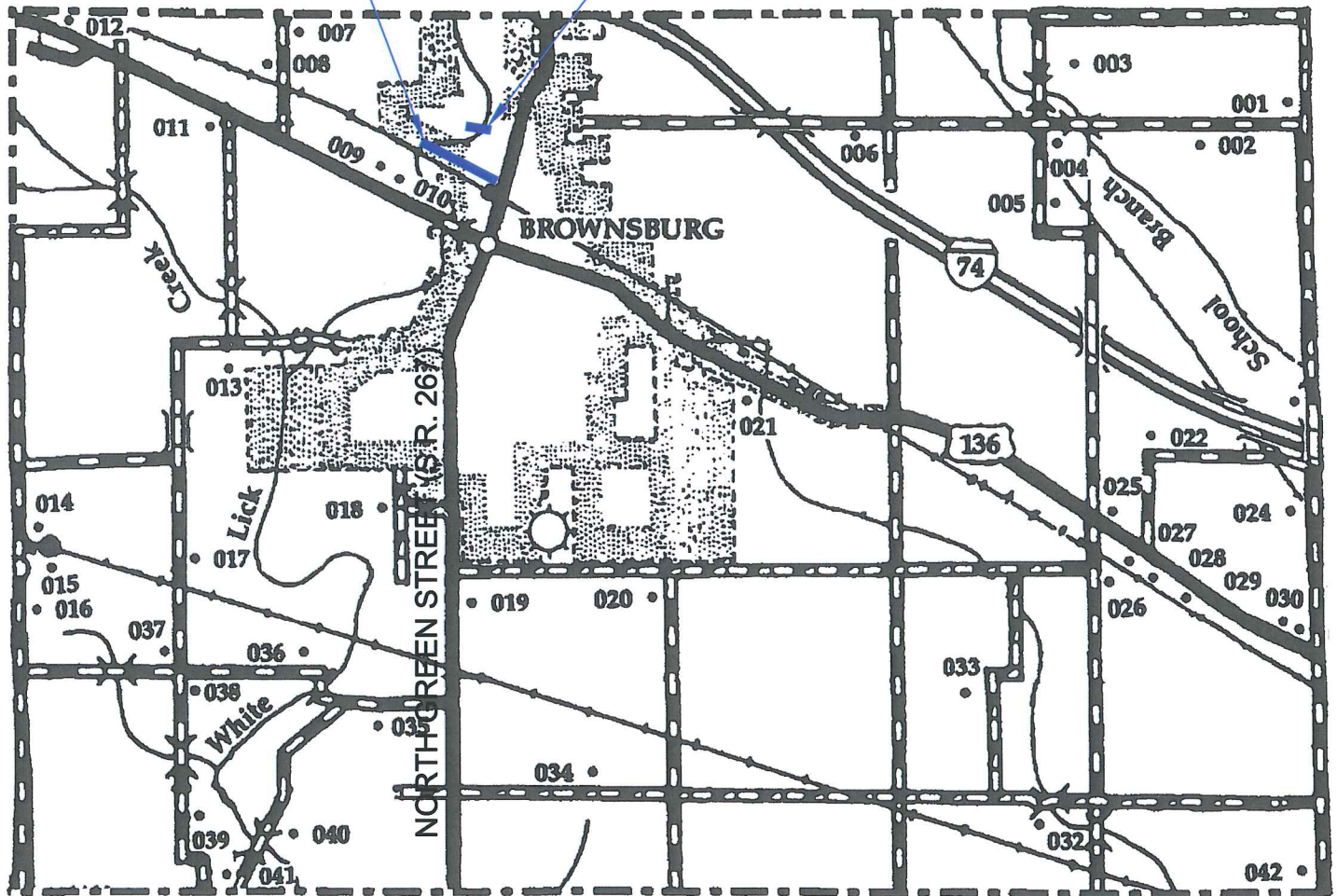
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SCALE: 1" = 150'
FIGURE NO. **4-3**

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PROJECT
LOCATION

PROJECT
LOCATION



SCALE: 1" = 4000'

SOURCE: HENDRICKS COUNTY INTERIM REPORT, PAGE 62

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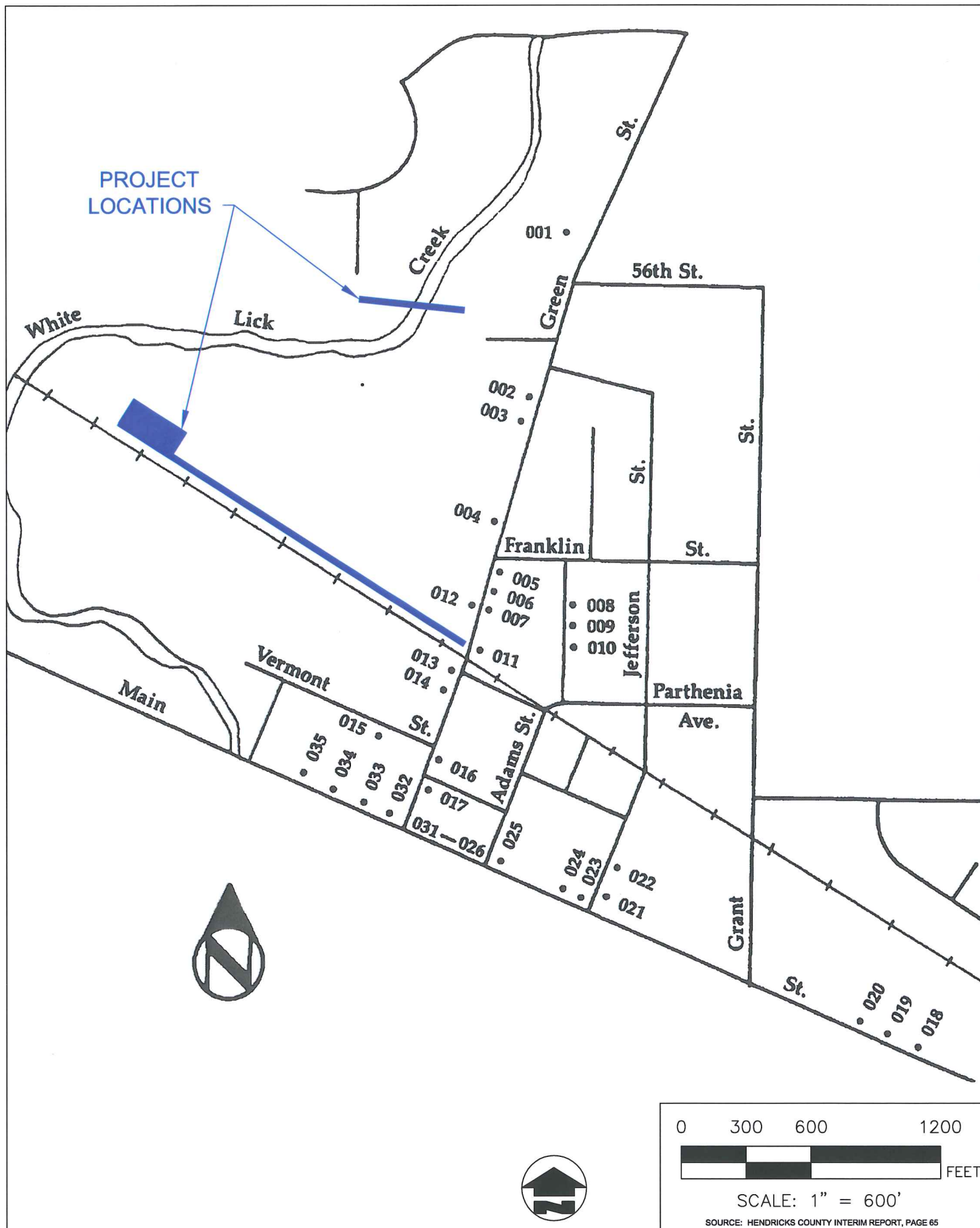
HISTORICAL SITES AND STRUCTURES (Lincoln Twp.) **PRELIMINARY ENGINEERING REPORT NEW WATER TREATMENT PLANT TOWN OF BROWNSBURG, INDIANA**

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SCALE:
1" = 4000'
FIGURE NO.

5-1



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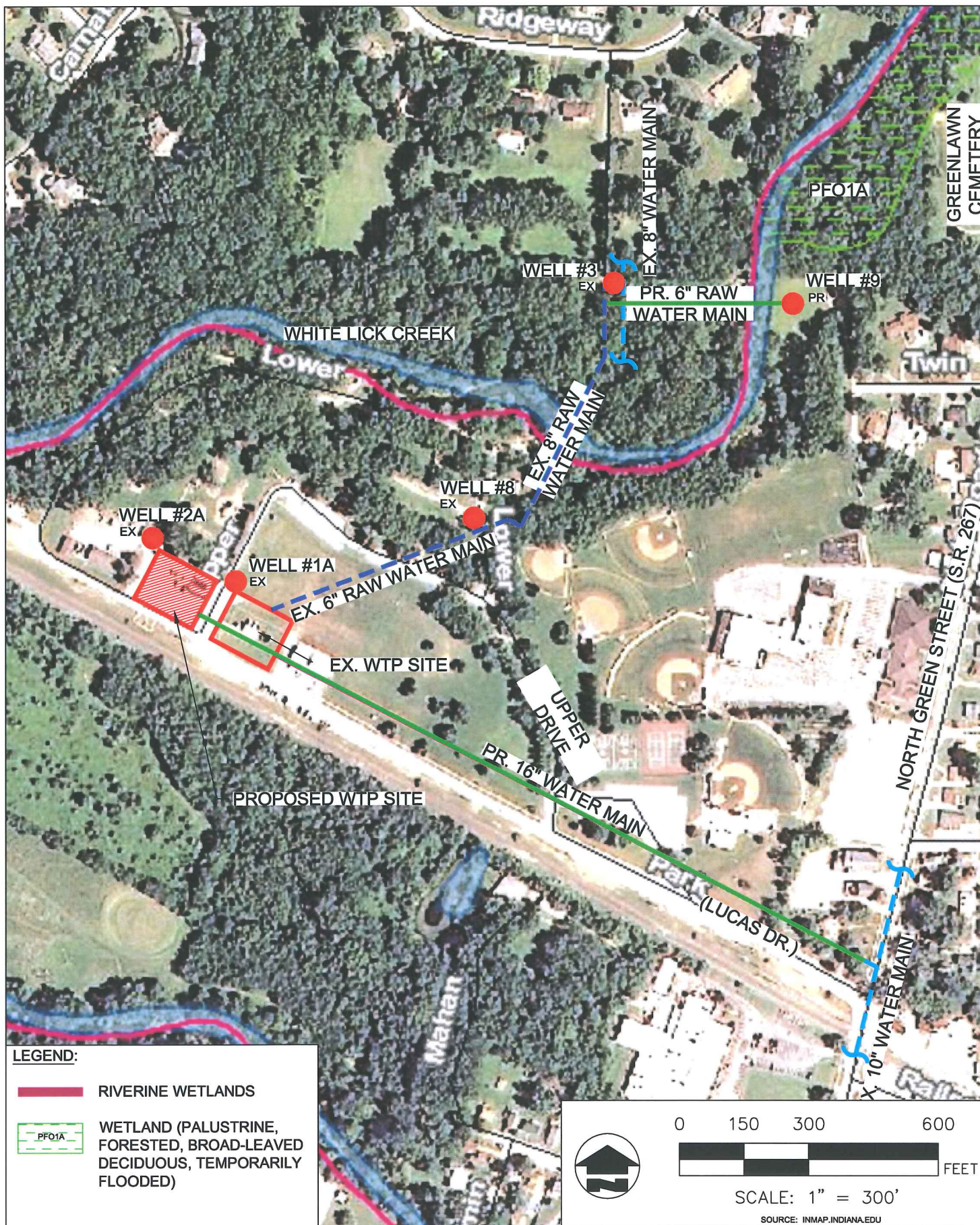
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HISTORICAL SITES AND STRUCTURES (Brownsburg) **PRELIMINARY ENGINEERING REPORT** **NEW WATER TREATMENT PLANT** **TOWN OF BROWNSBURG, INDIANA**

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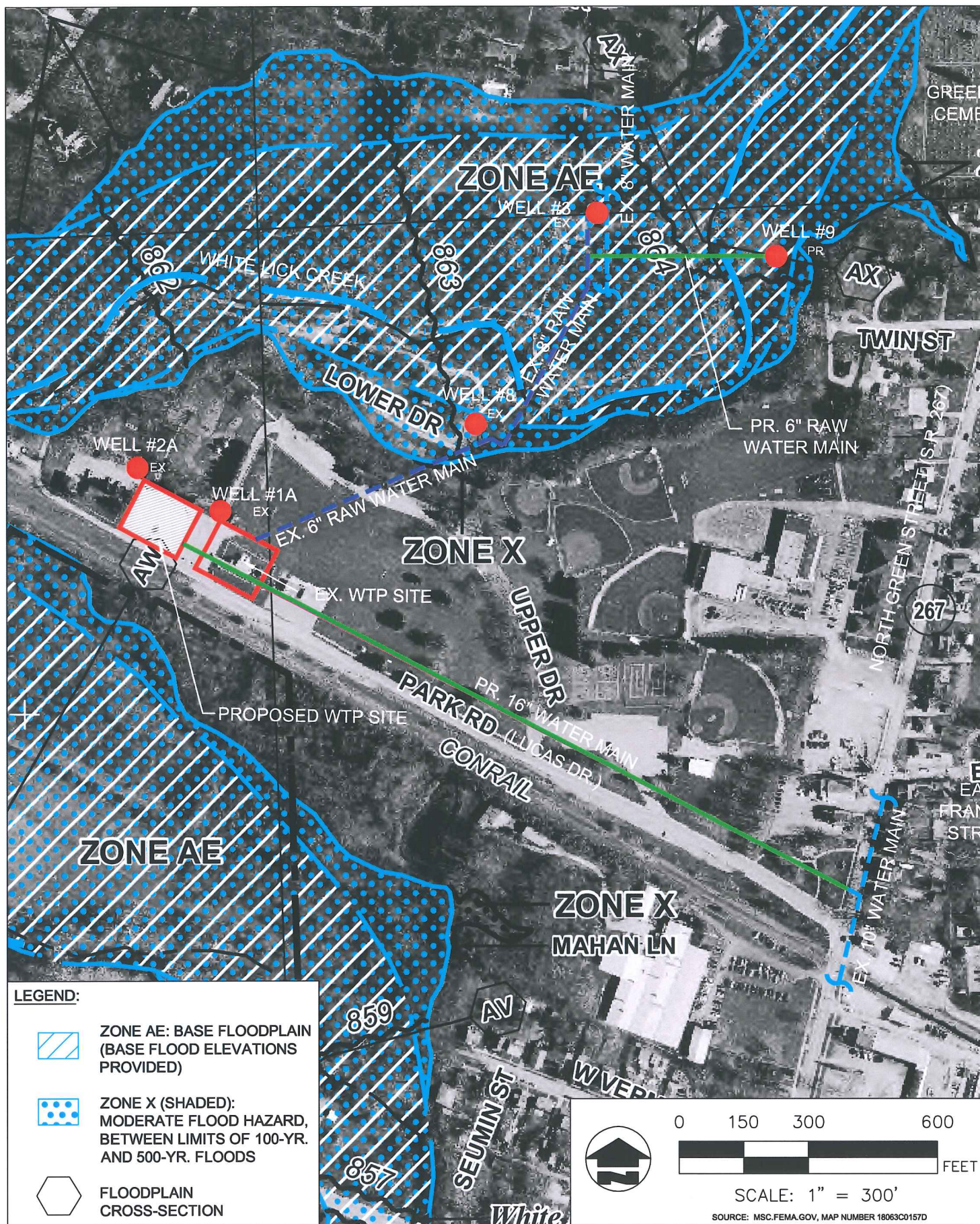
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SCALE:
1" = 600'
FIGURE NO.
5-2



GRW PROJECT NO. 3960-01				DESIGNED: DSW		<h2 style="margin: 0;">WETLANDS MAP</h2> <h3 style="margin: 5px 0 0 0;">PRELIMINARY ENGINEERING REPORT NEW WATER TREATMENT PLANT TOWN OF BROWNSBURG, INDIANA</h3>		 ENGINEERS - ARCHITECTS - PLANNERS www.grwinc.com		DATE: APRIL, 2011	
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LEGEND:



ZONE AE: BASE FLOODPLAIN
(BASE FLOOD ELEVATIONS PROVIDED)



ZONE X (SHADED):
MODERATE FLOOD HAZARD,
BETWEEN LIMITS OF 100-YR.
AND 500-YR. FLOODS



FLOODPLAIN
CROSS-SECTION

GRW PROJECT NO. 3960-01

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100-YEAR FLOODPLAIN MAP

PRELIMINARY ENGINEERING REPORT
NEW WATER TREATMENT PLANT
TOWN OF BROWNSBURG, INDIANA



SCALE: 1" = 300'

SOURCE: MSC.FEMA.GOV, MAP NUMBER 18063C0157D



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1" = 300'
FIGURE NO.

5-4